

**Who attended (audience), when and where:**

On January 23 and 24, 2019, two Silvopasture Train the Trainer Workshops were held in Harrison (Mid-Michigan Community College) and Chatham, MI (U.P. Research and Extension Center), respectively. The workshops were attended by 67 people in total; 40 at the Harrison location and 27 at the location in Chatham. Participants hailed from 36 different Michigan counties.

The attendance for both programs were capped due to budget and space restrictions. We believe attendance would have been greater if not for these limitations as the interest and response towards this program exceeded our expectations.

**Why the event was held (need): who cares and why, what has been done?**

The event was held to introduce proper silvopasture management and agroforestry techniques to agricultural, forestry and natural resource professionals. Silvopasture has traditionally been shunned due to improper grazing management of livestock in wooded pastures. More recently, grazers and extension professionals in the north east have promoted proper silvopasture techniques. These techniques rely on managed grazing, where livestock graze wooded areas for a shorter period of time, allowing for rest and recovery of forage and trees. These methods, used by extension professionals in the north east for over 12 years, demonstrate the benefits of proper silvopasture management. Those benefits include control of invasive species, year round thermal regulation of livestock, increased quality and quantity of forage, increased soil nitrogen, reduced competition between trees and diversification of income to the producer. Some, if not all of those benefits could be replicated in silvopasture systems created in Michigan.

Further, according to the National Agricultural State Statistics, 110,000 acres of woodlands are currently being grazed in Michigan. The quality of grazing management employed on those acres is unknown. Marketing of proper silvopasture techniques could lead to increased sustainability of the systems already in place. There is also literature supporting agroforestry systems as highly carbon-sequestering when compared to conventional grazing systems. With little local research and education being done on this system for which we see endless opportunity in Michigan, we determined that starting with a basic educational program and needs assessment of early adopters and agribusiness would provide the basis for future educational programming.

**What educational programming was provided: Results/Impact? What difference did it make- public value?**

In order to provide quality educational programming from experienced practitioners, we invited professionals from Cornell and Yale Universities to create the foundation for the program. Brett Chedzoy, Regional Extension Forester with Cornell, traveled to Michigan to deliver two presentations and answer questions at each workshop. In addition, Joe Orefice, Director of Forest and Agricultural Operations at Yale University, and Steve Gabriel, Agroforestry Specialist from Cornell University, presented at each workshop via zoom. The information presented focused heavily on silvopasture techniques and included some information on agroforestry techniques used to diversify landowner revenue streams.

At the end of each workshop, participants were asked to complete an evaluation of the program. The evaluation was completed by sixty-two of the sixty-seven participants. Participants were also asked to identify all of the sectors of natural resources in which they work. Thirty-five percent of the participants reported they worked with forestry, animal production or crop production. Eighteen percent reportedly worked in maple syrup operations, and nine percent listed that they worked in 'other' sectors, including soils, education, gardening, mushroom cultivation or MAEAP. In total, the participants reported that they manage or directly impact over five million acres.

When asked how the workshop affected their knowledge of the subject, eighty-seven percent reported an increase in knowledge, with fifty-six percent of those reporting their knowledge increased a great deal as opposed to moderately. Participants reported that prior to the workshop forty-seven percent were not likely to recommend silvopasture or agroforestry techniques, while 53 percent reported that it was somewhat or very likely. However, eighty-eight percent reported that their likelihood of recommending the techniques increased as a result of attending the program (18% increased slightly, 35% increased moderately and 35% increased a great deal).

Lastly, participants were asked to provide qualitative answers about silvopasture / agroforestry systems best suited for Michigan and about barriers to implementing such techniques in Michigan. In response to systems best suited for Michigan, silvopasture systems of various kinds were listed thirty times, by far the greatest response. Non-timber forest products, including mushroom cultivation and maple syrup operations were the second most listed systems. Finally, alley cropping and planting trees in pastures were listed as suitable for implementation in Michigan.

The greatest response to barriers was the lack of knowledge and the need for demonstration sites across the state (listed 46 times). Other barriers included the need for initial funding of infrastructure (such as water lines and fencing) and a desire to see a cost/benefit analysis for Michigan.

These answers are being used to help guide additional educational offerings in Michigan, including a series of webinars and the creation of demonstration sites. We will also be able to refer to these results for future grant funding proposals.